I Claim:

1. A rotary optical aligning apparatus comprising:

a pendulum disk;

an optical illuminator mounted in a lower portion of said disk;

a sleeve secured on a shaft of a driving motor of a rotary machine; with said pendulum disk stationarily pendently hanged on said sleeve on said shaft;

a multiple-pole magnet annularly secured on the sleeve to be simultaneously rotated with the rotation of the shaft; and

an electromagnetic coil eccentrically formed in an upper portion of the said pendulum disk, and concentrically disposed around said multiple-pole magnet for rotatably engaging said magnet within said electromagnetic coil; said electromagnetic coil electrically connected to said illuminator; whereby upon rotation of said shaft and said magnet, said electromagnetic coil will be electromagnetically induced to produce electricity to power said illuminator for projecting an optical line to an object for alignment or marking to be processed by the rotary machine.

2. An apparatus according to Claim 1, wherein said pendulum disk includes: a disk center (X_1) which is eccentric to a shaft axis (X_2) of the shaft of the driving motor and the disk center (X_1) is positioned below the shaft axis (X_2), said eccentric hole eccentrically formed in an upper portion of the pendulum disk and having a bearing formed in a base portion of the disk along a

perimeter of the eccentric hole for rotatably engaging a sleeve neck portion adjacent to the collar of the sleeve having the sleeve neck portion annularly secured on the shaft, a gravity center of the pendulum disk formed in a lower portion of the pendulum disk below the shaft axis (X_2); wherein the multiple-pole magnet is concentrically formed on the collar of the sleeve and simultaneously rotating with the rotation of the shaft to render as a rotor to be rotatably engaged in the electromagnetic coil, which is concentrically disposed around the magnet and is secured in an annular recess raidally enlarged from the eccentric hole in the pendulum disk which is gravitationally pendent and stationary to allow the electromagnetic coil to serve as a stator relative to the rotor of the magnet; a center of the eccentric hole being aligned with the shaft axis (X_2) of the shaft.

3. An apparatus according to Claim 1, wherein said optical illuminator is mounted in a chamber inclinedly formed in a lower portion of the pendulum disk for projecting an optical line downwardly to an object to be mechanically processed.

4. An apparatus according to Claim 1, wherein said illuminator is horizontally mounted in a horizontal chamber formed in a lower portion of the pendulum disk, a prism formed in front of the illuminator to reflect an optical line as projected from the illuminator downwardly through a radial slot in the disk to be

projected downwardly to an object.

5. An apparatus according to Claim 1, wherein said illuminator is a laser illuminator including a laser diode connected to a rectifying circuit electrically connected to said electromagnetic coil for powering said illuminator; and a lens including a cylindrical-surfaced lens formed in front of said laser diode.

6. A rotary optical aligning apparatus comprising:

a laser illuminator secured in a housing which is secured to a shaft of a rotary machine; and

a power generator electrically connected to said illuminator and operatively generating power when said rotary machine is rotated; whereby upon rotation of said rotary machine, said laser illuminator will be lit as powered by said power generator to project a laser line for alignment or marking.